



1 Purpose

The purpose of Taronga's Pollution Incident Response Management Plan is to improve the way pollution incidents are reported, managed and communicated to the general community. The plan is designed to facilitate better coordination with the relevant response agencies.

This document also covers chemical spill management procedures.

2 Legislative Requirement

In accordance with Part 5.7A of the Protection of Environment Operations Act 1997 and the Protection of the Environment Operations (General) Regulation 2009 holders of an EPA Environment Protection Licence (EPL) are required to:

- prepare a Pollution Incident Response Management Plan (section 153A, POEO Act). This plan will form part of Taronga's Emergency Procedures Manual.
- test the plan in accordance with the POEO Regulation (clause 98E).
- report pollution incidents immediately to the appropriate authority.
- notify all relevant authorities about the incident under the POEO Act. For Taronga authorities include the EPA, WorkCover NSW, Emergency Services, Ministers Officer and Mosman Council. This will ensure that the appropriate agencies have the information they need to respond promptly and without delay.

Penalties exist under the POEO Act for failing to comply with this requirement.

2.1 Licence Details

Taronga Zoo holds an Environment Protection Licence (Number: 1677). Details of the licence can be viewed at [Taronga Zoo EPL# 1677](#).

Water quality monitoring results can be viewed at [Taronga Zoo Water Quality Monitoring Results](#)

3 Definition

3.1 A pollution incident is:

An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.



A pollution incident is required to be notified if there is a risk of material harm to the environment, which is defined in section 147 of the POEO Act as:

- (a) harm to the environment is material if:
 - (i) it involves actual or potential harm to the health or safety of human beings or ecosystems that is not trivial, or
 - (ii) it results in actual or potential loss or property damage of an amount or amounts in aggregate, exceeding \$10 000 (or such other amount as is prescribed by the regulations)and
- (b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

3.2 Immediately

Immediately is defined as promptly and without delay. For the purposes of external notification, Taronga is required to notify external authorities within 1 hour of learning that the incident has occurred.

Refer to Appendices:

- *Appendix 1 During Business Hours - Pollution Incident Response Flowchart*
- *Appendix 2 Out of Business Hours - Pollution Incident Response Flowchart*



4 Procedure - during business hours (7.30am- 5.00pm)

4.1 Immediate Internal Notification

Notify the Switchboard on **internal emergency number “111”**

State the following:

- exact location of the incident;
- the nature and extent of the incident; and
- whether First Aid or Emergency Services are required.
- Switchboard will identify an Emergency Coordinator to assist at the incident scene with the management of the incident.

4.2 Management Action

- Ensure the area to safe and secure to approach.
- Locate the source of the spill and identify if any hazardous materials are involved.
- Locate Material Safety Data Sheet (MSDS) for the substance (if known) to obtain information about clean-up procedures and advice on appropriate Personal Protection Equipment that may be required.
- Take steps to prevent unauthorised staff or visitors' access.
- Assess potential harm and minimise environmental contamination. i.e. ensure substance is prevented from entering water body using spill kit, hay bales or other suitable absorbent material.

4.3 Response Flowchart (within business hours)

Refer to Appendix

5 Procedure - after business hours (5.00pm – 7.30am)

5.1 Immediate Internal Notification

Notify Security via:

- **Radio:** Channel 5 (after hours radio channel)
- **Ph:** (02) 9978 4650
- **Mobile:** 0417 299 450

State the following:

- exact location of the incident;



- the nature and extent of the incident; and
- whether First Aid or Emergency Services are required.
- Security to contact Emergency Services on (000).

5.2 Management Action

- Ensure the area to safe and secure to approach.
- Locate the source of the spill and identify if any hazardous materials are involved.
- Locate Material Safety Data Sheet (MSDS) for the substance (if known) to obtain information about clean-up procedures and advice on appropriate Personal Protection Equipment that may be required.
- Take steps to prevent unauthorised staff or visitors' access.
- Assess potential harm and minimise environmental contamination. i.e. ensure substance is prevented from entering water body using spill kit, hay bales or other suitable absorbent material

5.3 Disposal & Incident Reporting

Ensure environmentally responsible disposal of contaminated material as per the MSDS, HR Chemical Management Policy and relevant legislation.

Disposal must be arranged with an EPA licensed contractor.

An Environment Incident and/or WHS Incident Form must be completed in accordance with Taronga's internal incident reporting procedures.



5.4 Risk Assessment & Management Plan

This section includes identification, description and likelihood of the primary hazards to human health or the environment associated with operation of the waste water treatment plant.

Taronga's Waste Water Treatment Plant is located adjacent the harbour foreshore, a sensitive marine environment and immediately adjacent to a residential area. All care must be taken to ensure both environmental and health risks are eliminated or mitigated in accordance with this plan of management.

| Activity | Potential hazard | Risk score | Pre-emptive actions | Community Notification |
|---|------------------|------------|---|---|
| Chemical storage | Chemical spill | Low risk | All chemicals stored in bunded area to contain any spills. Spill kits are available to absorb spill. | <i>Website notification.</i> <i>As per notification flowchart</i> |
| Chemical delivery – transport through zoo grounds | Chemical spill | Low risk | Delivery pre- authorised outside business areas. Delivery truck escorted through zoo via approved route. Authorised by Water Technicians. <i>Ref: Chemical Delivery Work Procedure</i> | <i>Mosman council advised for major incidents. Residents notified if deemed necessary – follow notification flowchart</i> |
| Chemical use | Chemical spill | Low risk | Chemical handling is minimised by direct dosing into the system. Chemicals are not decanted. | <i>Website notification.</i> <i>As per notification flowchart</i> |

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Emergency Response Plan

Pollution Incident Response Management Plan



| Activity | Potential hazard | Risk score | Pre-emptive actions | Community Notification |
|---------------|------------------------------|------------|---|---|
| Discharge | Contaminated discharge water | Medium | Water discharged is tested as per licence conditions to ensure quality falls within parameters for TSS, BOD and pH. | <i>Website notification.</i> <i>As per notification flowchart</i> |
| Fuel delivery | Fuel spill | Low | Fuel tanker enters zoo on approved route and at pre-arranged time. Fuel bowers are managed in accordance with Environmental Plan for UPSS. Fuel bowers are filled inside bunded area. Valve to adjacent stormwater pit can be isolated in event of a spill. Pit is emptied as required by indicator on UPSS. Sensors indicate any problem with UPSS. Recycled Water Treatment Plant can capture and isolate fuel in the event that spill that cannot initially contained within the bunded area at fuel bowers. | <i>Website notification (if required)</i> <i>Relevant regulatory authorities advised for major incidents.</i> <i>Residents notified if deemed necessary – follow notification flowchart</i> <i>As per notification flowchart</i> |

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| Activity | Potential hazard | Risk score | Pre-emptive actions | Community Notification |
|----------|-------------------------------------|------------|--|---|
| Overflow | Overflow contaminated with sediment | Medium | <p>Sediment control plans and filter socks around stormwater ingress points.</p> <p>Regular program of emptying on site CDS units.</p> <p>Regular maintenance program of pumping out sediment in rising mains.</p> <p>Stockpiles of soil/landscaping are stored no longer than 48 hours before removal off site.</p> <p>Stockpiles must be covered by contractor as part of the projects environmental management plan</p> <p>Check compliance regularly by Project Manager and Manager, Environment</p> | <p><i>Website notification.</i></p> <p><i>As per notification flowchart</i></p> |



5.5 Inventory of pollutants

| Pollutant | Source | Quantity |
|--------------------------------|-----------------|-------------|
| <i>Sodium hydrochloride</i> | Liquid chemical | 1500L |
| <i>Hydrochloric acid</i> | Liquid chemical | 40L |
| <i>Poly aluminium chloride</i> | Liquid chemical | 600L |
| <i>Unleaded Petrol</i> | Liquid | 8000L (max) |
| <i>Diesel</i> | Liquid | 8000L (max) |

5.6 Safety equipment

| Safety Equipment | Description | Location |
|---------------------------------|--|------------------------------------|
| Chemical MSDS | Information regarding chemical | Chemical storage areas |
| Leak detection for petrol tanks | Leak detection system for underground petrol storage system | Facilities office, petrol bowzers. |
| Spill kits | Equipment to absorb spills at designated locations. | Facilities office, petrol bowzers |
| PPE | Personal protection equipment which is required in accordance with MSDS specifications | Chemical storage areas |

5.7 Site Map

Refer to set of detailed site maps that indicate:

- location of the premises,
- the surrounding area that is likely to be affected by a pollution incident,
- the location of potential pollutants on the premises,
- the location of any stormwater drains on the premises, and
- the discharge locations of the stormwater drains to the nearest watercourse or water body.



6 Emergency Contact Details

6.1 Primary Emergency Contact

| Name | Position | Contact Number |
|-----------------------|---|---------------------|
| <i>Simon Duffy</i> | <i>Director, Taronga Zoo Operations</i> | <i>0438 471 343</i> |
| <i>Rodd Stapley</i> | <i>Head of Asset Management</i> | <i>0459 824 197</i> |
| <i>Anne Kehlhofer</i> | <i>Manager, Environmental Sustainability</i> | <i>0415 336 792</i> |
| <i>Hayden Turner</i> | <i>Manager, Guest Experience & Security</i> | <i>0437 248 500</i> |
| <i>24 hr Security</i> | <i>Security Officer</i> | <i>0417 299 450</i> |

6.2 Secondary Emergency Contact

The following position must be notified of an incident in order to ensure the relevant authorities are notified in accordance with the legislation refer to Section 4.3

| Name | Position | Contact Number |
|---------------------------|--|---------------------|
| <i>Bettina Sammut</i> | <i>Director, People and Culture</i> | <i>0408 668 311</i> |
| <i>Valerie Moushigian</i> | <i>Manager, Work Health & Safety</i> | <i>0428 006 710</i> |
| <i>Claire Laffan</i> | <i>Manager, Communications</i> | <i>0467 801 889</i> |



7 Notification

Under section 148 of the POEO Act Taronga is required to report pollution incidents.

| Authority | Contact Number |
|---------------------------|----------------|
| EPA | 131 555 |
| NSW Health | 9391 9000 |
| Fire & Rescue, Police NSW | 000 |
| Safe Work NSW | 13 10 50 |
| Mosman Council | 9978 4000 |

Depending on the scale of the incident Media Relations may also require that Taronga notifies the following government departments:

| Authority |
|------------------|
| Ministers Office |
| Premiers Office |

8 Training & Awareness

8.1 Employees

Training and Awareness sessions will be held with key stakeholders upon implementation of the PIRMP. A structured information package will also be included into Taronga Zoo staff Induction program. All training records are held with People and Learning.

8.2 Contractors

Contractors will be made aware of the PIRMP requirements via Conditions of Entry for Working on site at Taronga and Induction. Records are held with Capital Works, Infrastructure and Operations.

9 Complaints

Complaints can be made directly to Taronga Zoo in writing to tz@zoo.nsw.gov.au or webmaster@zoo.nsw.gov.au or by phone on (02) 9969 2777



10 Communicating with the Local Community

Taronga is committed to ensuring that those in our local community who may be potentially impacted by a pollution incident are adequately notified. Notifications to the community is the responsibility of Taronga Media Relations Department and would be undertaken via Taronga's website and Facebook and via Mosman Council, where considered appropriate.

11 Requirements of the Plan

This plan is effective from 1 September 2012.

A copy of this plan must be forwarded to the relevant response agencies in written form. The plan must also be available at Taronga (located at Facilities Office) and be available to be provided to an authorised EPA officer on request.

A copy of the current license must be kept with this plan and be available to an authorised EPA officer on request.

| Version | Date of Review: | Reviewed by: | Reason for review: |
|-------------|-----------------|---------------------|---|
| 3.3 | 09/07/19 | Mgr. Sustainability | Stormwater sediment incident May 2019 |
| 3.4 | 30/08/19 | Mgr. Sustainability | Update contact details of Manager Security & Manager, WHS |
| Next review | 29/02/20 | | Annual pollution drill test |